

### **REMARKS**

Claims 1-9 were pending in the application. Claims 1, 5, and 6 have been rejected. Claims 2-4 have been objected to. This response amends claims 1-2, cancels claims 7-9 in response to the restriction/election requirement, and adds new claims 10-15, leaving claims 1-6 and 10-15 for the Examiner's consideration. Reconsideration and withdrawal of the rejections set forth in the Office Action dated March 12, 2007 are respectfully requested.

#### **I. Election/Restrictions**

During the telephone conversation with Chun Eng on March 1, 2007 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-6.

The Applicant affirms the election without traverse to prosecute the invention of Group I, claims 1-6. Non-elected claims 7-9 are withdrawn from further consideration by the examiner. The Applicant reserves the right to prosecute subject matter of these claims in a continuation of the current application in the future.

#### **II. Rejections under 35 U.S.C. §102(e)**

Claims 1 and 5 are rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,462,788 to Tan et al.

##### **The prior art**

Tan teaches detection of "color bleeding artifacts" via the approach of first identifying "blocks that contain moving edges", which are "preferred not processed further," then "preferably" examining "the remaining blocks ... for the likelihood of having color bleeding artifacts," wherein the blocks are "not processed further if the likelihood is low" (col. 1, lines 5-61). More specifically, the likelihood can be determined by "whether the chrominance values meet at least one non-uniformly threshold condition", and "the subsequent de-color bleeding filtering is performed only if the threshold condition is met" (col. 3, lines 4-8). In other words, Tan detects artifacts in a video stream as only those blocks ("groups of pixels") that do not contain moving edges and have chrominance values above certain threshold. However, there is no teaching of comparison or differentiation of detected values between different lines (blocks) of the video stream in Tan's approach.

The prior art distinguished

To anticipate a claim under 35 U.S.C. §102, a prior art reference must teach each and every element of a claim. Independent claim 1 has been amended to include the language "detecting a presence of artifacts in an incorrectly upsampled MPEG-2 video stream based on a difference between even line and odd line frequency detection values of the video stream." Tan does not teach calculating difference between even and odd line frequency detection values. Consequently, claim 1 is allowable over prior art.

Since claim 5 depends on claim 1, claims 1 and 5 cannot be anticipated by Tan under 35 U.S.C. §102(e) for at least this reason, and the Applicant respectfully request rejections with respect to these claims under 35 U.S.C. 102(e) be withdrawn.

III. Rejections under 35 U.S.C. §103

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al., as applied to claim 5 above, and in further view of U.S. Patent 5,684,544 to Astle.

To render a claim obvious, the prior art, whether considered alone or in combination, must teach each and every element of the claim. Astle teaches upsampling of subsampled chroma pixels of a picture, but there is no teaching of artifacts detection based on difference between even line and odd line frequency detection values of the video stream. Tan does not teach such artifacts detection approach either as discussed above. Therefore, claim 6 cannot be rendered obvious over Tan further in view of Astle under 35 U.S.C. 103(a) for at least this reason, and the Applicant respectfully request rejections with respect to these claims under 35 U.S.C. 103(a) be withdrawn.

IV. Added Claims

Claims 10-15 have been added. Method claims 10-12 are patentable over the suggested prior art for reasons analogous to those argued for claim 1. Apparatus claims 13-15 somewhat parallel the elements of method claims 10-12 are patentably distinguished over the prior art for reasons analogous to the method claims.

V. Allowable Subject Matter

Claims 2-4 are objected to as being dependent upon a rejected claim base, but would be allowable if rewritten in independent form.

Claim 2 has been rewritten in independent form to include all of the limitations of its base claim 1. Since claims 3-4 depend on claim 2, the Applicant respectfully requests that claims 2-4 be allowed.

V. Conclusion

In view of the foregoing, the applicant submits that the claims pending in the application comply with the requirements of 35 U.S.C. §112 and patentably define over the prior art. A Notice of Allowance is therefore respectfully requested.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 838-4349

Respectfully submitted,  
Perkins Coie LLP

Date: July 12, 2007

By, 

David Xue, Reg. No. 54,554 for  
R. Michael Ananian, Reg. No. 35,050

Correspondence Address:  
Customer No. 22918  
Perkins Coie LLP  
P.O. Box 2168  
Menlo Park, California 94026  
(650) 838-4300